

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 6 and 20-22 are presently active in this application, Claims 1-5 and 11-16 having been canceled, Claims 6 amended and new Claims 20-22 added by the present amendment, Claims 7-10 and 17-19 having previously been withdrawn from consideration as directed to a non-elected invention.

In the outstanding Official Action the specification, Claims 11-16 and Figures 10 and 11 were objected to as including informalities requiring correction; Claims 1, 3-5 and 11-16 were rejected under 35 USC §102(b) as being anticipated by Ryun et al (U.S. Patent No. 5,484,737); Claim 2 was rejected under 35 USC §103(a) as being unpatentable over Ryun et al in view of Applicant's admitted prior art; and Claim 6 was rejected under 35 USC §103(a) as being unpatentable over Ryun et al in view of Seki (U.S. Patent No. 5,032,888).

In response to the several grounds for objection, each informality has been corrected herewith and the several grounds for objection are believed to have been overcome.

In light of the several grounds for rejection, Claim 6 has been amended to be in independent form, and Claims 1-5 and 11-16 have been canceled. New Claims 20-22 corresponding to original Claims 3-5 have also been added. No new matter has been added.

Applicant respectfully traverses the outstanding rejection of Claim 6 under 35 USC §103 as being unpatentable over Ryun et al in view of Seki.

Ryun et al does not disclose the device described in Claim 6. Seki discloses IGBT having a high breakdown voltage and being a large-current device. The Seki IGBT has a thick base layer (60 micrometers or 90 micrometers) to increase the breakdown voltage.<sup>1</sup>

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<sup>1</sup> Seki, column 4, line 15 to 28.

However, amended Claim 6 is directed to a BiCMOS device which is operated with an RF signal. Therefore, it is respectfully submitted Claim 6 defines a device completely different from that disclosed by Seki. In particular, a BiCMOS device does not have such a thick base layer as an IGBT, as is readily evident from Applicant's Figure 2 disclosure, for example, wherein the thickness of the base layer of the BiCMOS device is on the order of a nanometer. Further, page 11, lines 29-31 of Applicant's application explains that the second base layer (B2), in which a depression layer extends, is about 10 nm thick. That is, the base layer of the BiCMOS device has approximately 1/1000 thickness of the base layer of the IGBT described in Seki.

Thus, it is respectfully submitted that the BiCMOS device defined in Claim 6 is inherently different from the IGBT device described in Seki. Accordingly, Applicant respectfully submits that there is no motivation to combine Seki with Ryun et al. Therefore, Applicant believes that it is unnecessary to further limit the thickness of the base layer in the claims in view of the clear distinction between base layers of a BiCMOS device and an IGBT device, and since the thickness of the base layer is to some extent variable in some degree dependent on impurity concentration of the base layer.


Accordingly, Applicant respectfully submits that amended Claim 6 patentably defines over the cited art and is in condition for allowance. Claims 20-22, which depend from Claim

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6, are also thus believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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IN THE DRAWINGS

The attached sheet of drawings includes changes to Figs. 2, 10 and 11. These sheets, which include Figs. 2, 10 and 11, replace the original sheets including Figs. 2, 10 and 11.

Attachment: Replacement Sheets